FIG. 1A

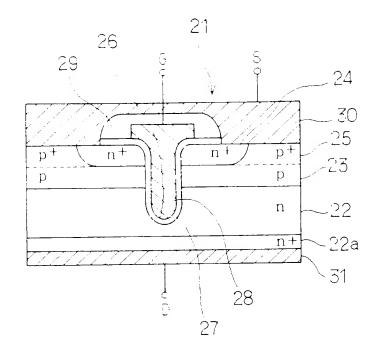
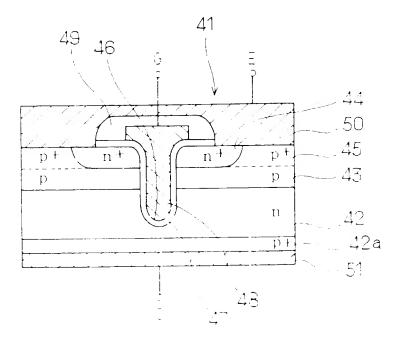
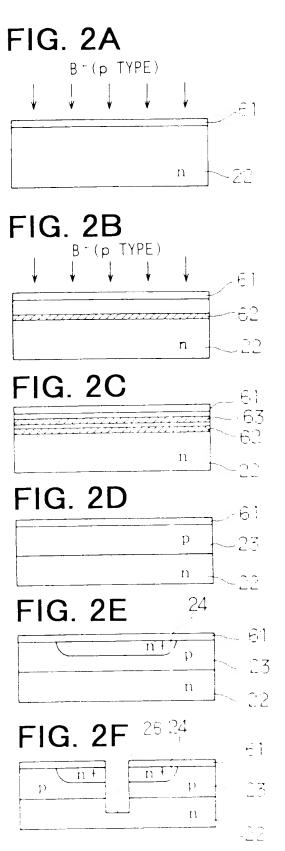


FIG. 1B





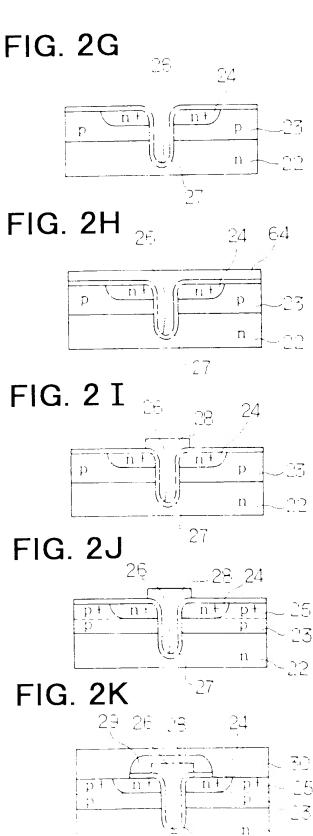


FIG. 3A

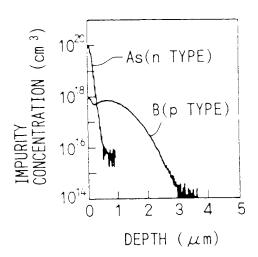


FIG. 3B

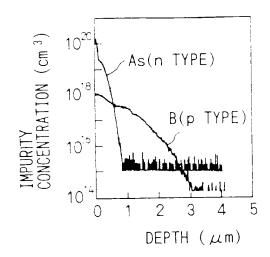


FIG. 4A

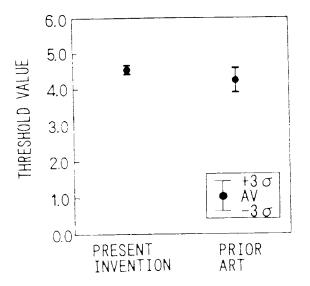


FIG. 4B

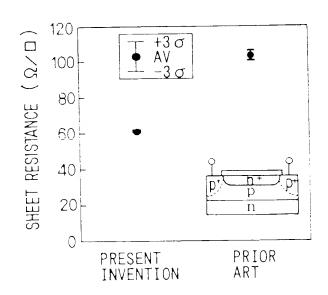


FIG. 5

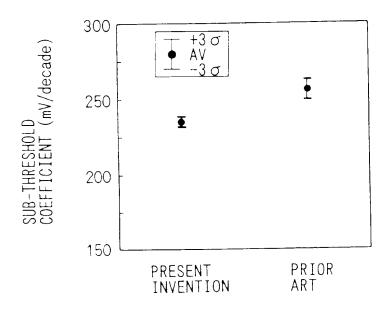


FIG. 6

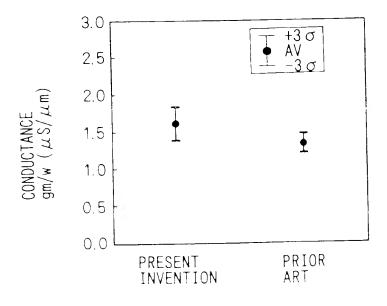


FIG. 7

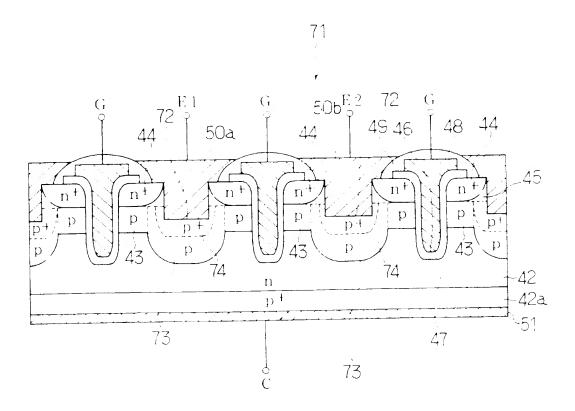


FIG. 8A

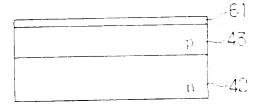


FIG. 8B

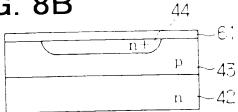


FIG. 8C 46

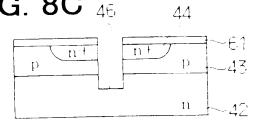


FIG. 8D 46

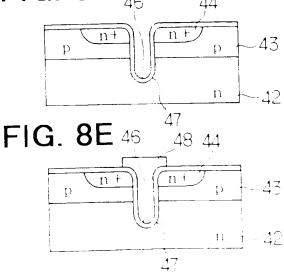


FIG. 8F

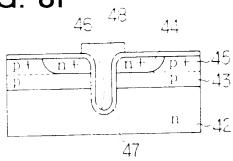


FIG. 8G

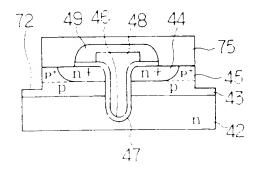


FIG. 9A

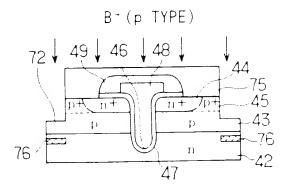


FIG. 9B

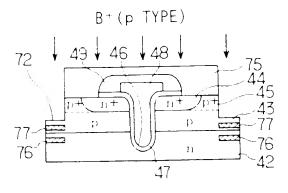


FIG. 9C

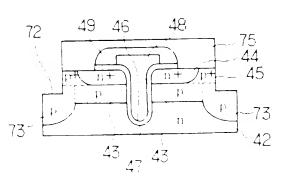


FIG. 9D

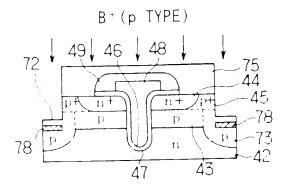


FIG. 9E

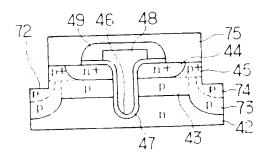
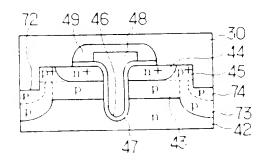
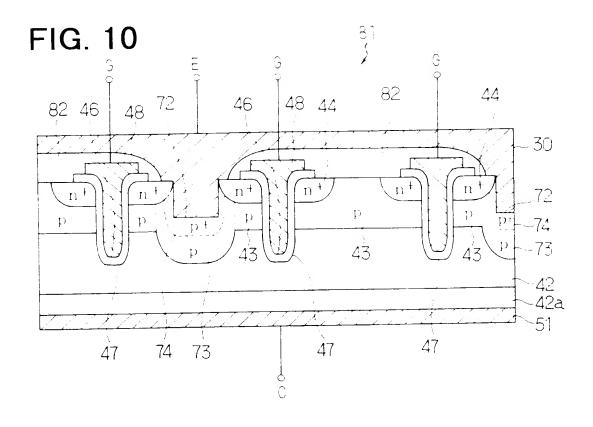


FIG. 9F





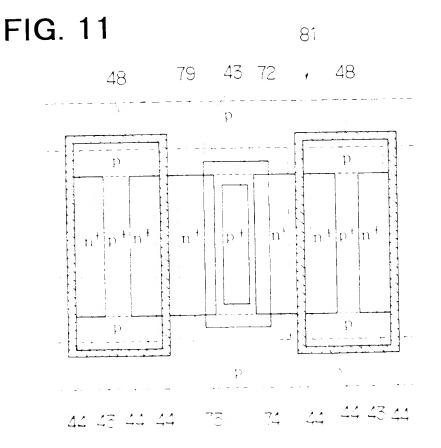


FIG. 12A

83

48a 79 43 72 , 48a

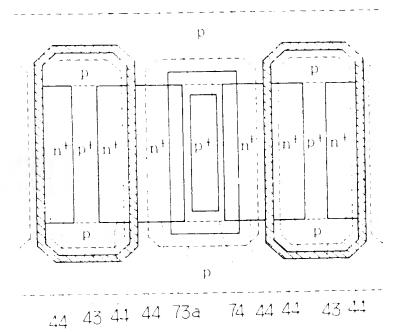


FIG. 12B

84

48b 79 ⁴³ 72 , 485

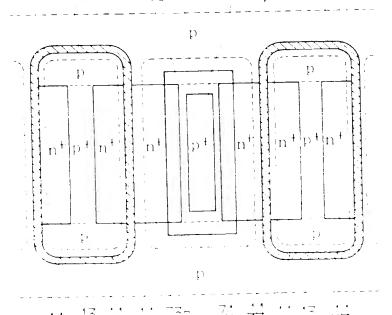


FIG. 13A

85

48 79 43 72 , 48

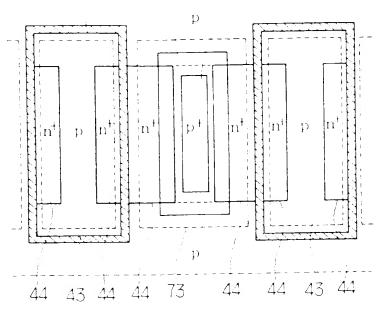


FIG. 13B

72a 79 ⁴³ 72 72a

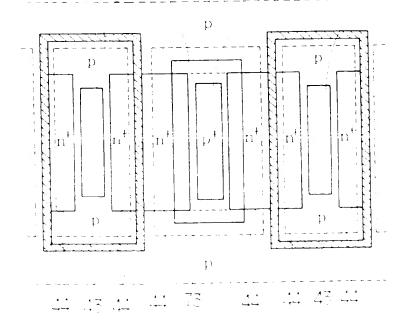


FIG. 14

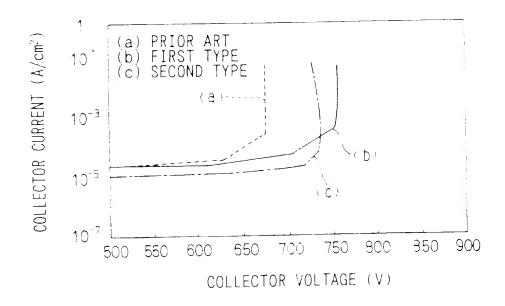


FIG. 16

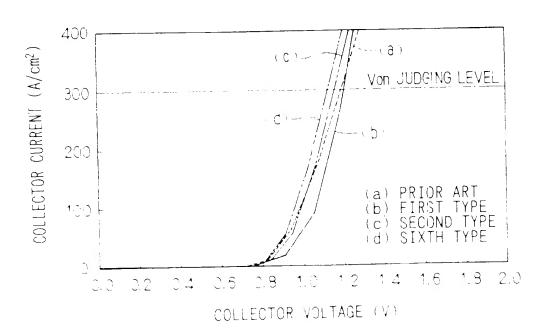


FIG. 15C ELECTRIC FIELD CONCENTRATION ELECTRIC FIELD CONCENTRATION FIG. 15B ELECTRIC FIELD CONCENTRATION FIG. 15A

FIG. 17

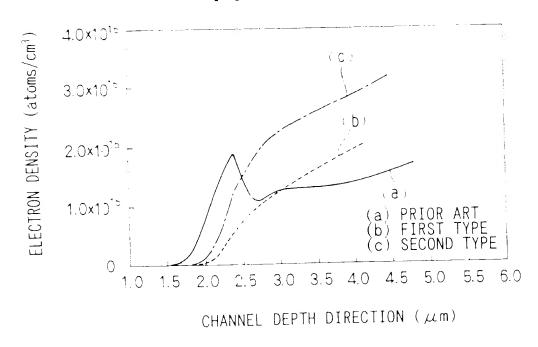
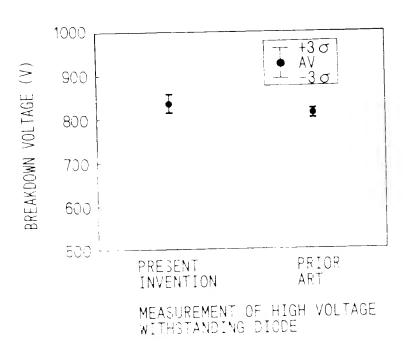
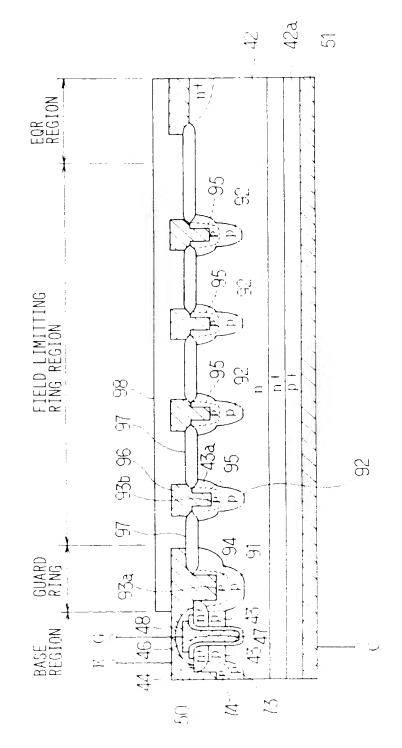
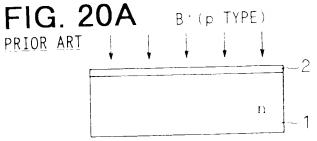
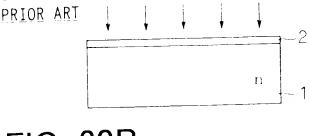


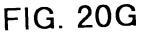
FIG. 19











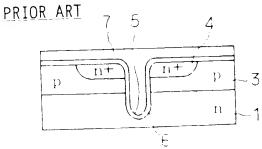


FIG. 20B



FIG. 20H

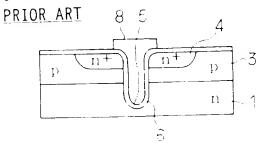


FIG. 20C



FIG. 20 I

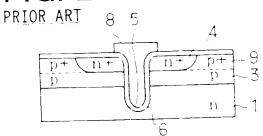
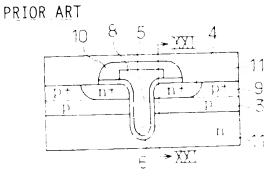


FIG. 20D 4 PRIOR ART 11+ Þ Π

FIG. 20J



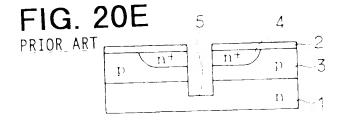
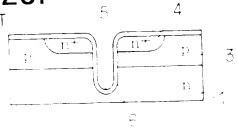


FIG. 20F PRIOR ART

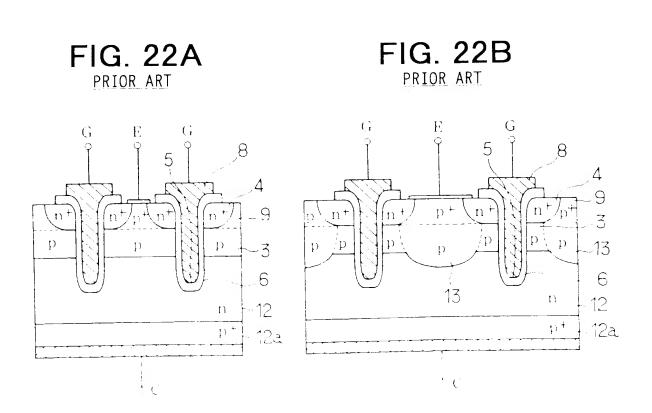


PRIOR ART
HIGHLY DOPED
EMITTER REGION

BASE N-TYPE
REGION SUBSTRATE

(CHANNEL)

n p n



DEPTH



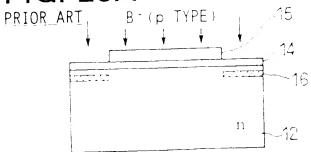


FIG. 23B

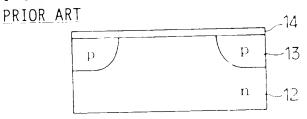


FIG. 23C

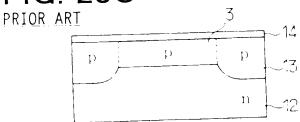


FIG. 23D

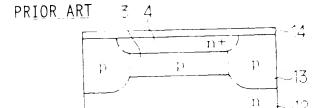


FIG. 23E

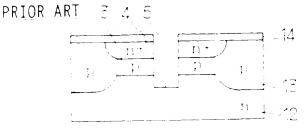


FIG. 23F

PRIOR ART

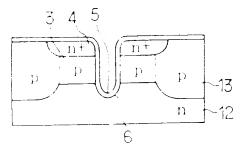


FIG. 23G

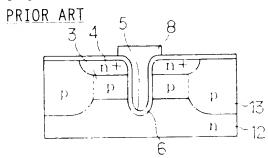


FIG. 23H

PRIOR ART

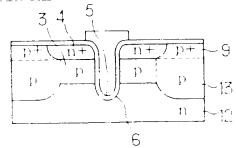


FIG. 23 I

PRIOR ART

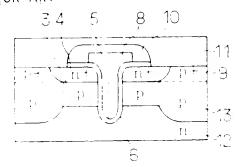


FIG. 24 PRIOR ART

